

increasing intra- and inter-modal competition make it wholly unrealistic to assume that ILECs will enjoy increasing economies of scale; if anything, those scale economies are likely to *decrease* as ILECs lose market share.¹⁵⁶ Finally, in any event, setting an improperly aggressive “g-factor” would be just as destructive—and just as unnecessary—as setting an improperly aggressive X-factor.¹⁵⁷

C. Subdividing MSAs into Smaller Markets Would Create New Administrative Burdens Without Consumer Benefits

The *Notice* asks whether, for pricing flexibility purposes, the Commission should continue defining the relevant geographic market at the MSA level or whether it should redefine the market by subdividing MSAs into smaller units. The short answer is that there is no need for a change in approach, and it would do more harm than good.

In the *Pricing Flexibility Order*, the Commission adopted the MSA as the relevant geographic unit to avoid the administrative burdens of more geographically segmented approaches. As it explained, “the costs, particularly the administrative costs, of granting pricing flexibility on a wire center-by-wire center basis outweigh the benefits of protecting against [any] theoretical harms. To the extent that an incumbent LEC attempts to use pricing flexibility in a predatory manner, aggrieved parties may pursue remedies under the antitrust laws or before this Commission[.]”¹⁵⁸ The D.C. Circuit fully agreed. In upholding the MSA as the relevant geographic unit, the court noted that “the FCC decided that smaller geographic areas would

¹⁵⁶ See Kalt Decl. ¶ 75.

¹⁵⁷ See Klick & Baranowski Decl. ¶¶ 34-37.

¹⁵⁸ *Pricing Flexibility Order* at 14267 ¶ 83.

require incumbent LECs to file too many pricing flexibility petitions to achieve meaningful relief—a conclusion petitioners do not dislodge with any evidence to the contrary.”¹⁵⁹

What was true then is more so today: the costs of further geographic segmentation in the pricing flexibility analysis would be too high both for the regulators and the regulated. To begin with, making this change would require either unwinding—or else grandfathering—many existing special access contracts; either way, the process would give rise to significant implementation problems and disputes. More fundamentally, narrowing the geographic scope of flexibility would greatly complicate the negotiation of special access contracts with large, multi-MSA customers, for it would make contracting around SBC’s pricing restrictions still more cumbersome.¹⁶⁰ The clear market trend is toward contracts with carrier customers, including enterprise-wide contracts, that cover *larger*, not smaller, geographic areas, in part because of the service needs of retail customers whose operations extend across MSA boundaries.¹⁶¹

Moreover, the benefits of redefining the geographic market would be minimal, for the existing MSA-oriented approach gives rise to no anticompetitive conduct in the first place. SBC sells more than 90% of its DS_n-level and 80% of its OC_n-level special access services to large wholesale customers.¹⁶² The prices of the services sold in contracts with wholesalers have virtually always applied on an MSA-wide basis,¹⁶³ leaving no room for anticompetitive pricing in the sale of services to these customers in less competitive wire centers within an MSA.

¹⁵⁹ *WorldCom*, 238 F.3d at 461.

¹⁶⁰ Casto Decl. ¶ 71.

¹⁶¹ *See id.* ¶ 72.

¹⁶² *Id.* ¶ 11, n.6.

¹⁶³ *Id.* ¶ 65.

In any event, the market would promptly correct any exclusionary pricing practices within Phase II MSAs. First, such practices would invite SBC's large wholesale customers to exploit the resulting arbitrage opportunity by reselling their contractually priced special access services to the smaller customers that might otherwise pay the monthly base tariff rates.¹⁶⁴ Second, as discussed in Part I(A), the Phase II pricing flexibility triggers significantly understate the total amount of competition within an MSA; much of the uncounted competition comes from intermodal providers, such as cable and wireless firms, which are especially likely to target the lower-density wire centers within an MSA, where the costs savings of fixed wireless technology are most striking. This means that, even in such wire centers, the incumbent LECs will not be able to sustain prices substantially above competitive levels. Finally, and in any event, the Commission has determined that "the availability of UNEs is itself a check on special access pricing [that provides] carriers using special access . . . substantial bargaining power when negotiating special access rates."¹⁶⁵

D. The Commission Should Not Interfere with Carriers' Ability to Offer Region-Wide Volume and Term Discounts

The Commission should reject calls to restrict the ability of price-cap LECs to offer volume and term discounts for special access services—discounts that are wholly optional for customers and that perfectly resemble the buyer-seller arrangements that routinely arise in competitive markets. None of the various features of these plans highlighted in the *Notice*—penalties imposed on customers in the event customers fail to meet their commitments under the plans, minimum volume requirements based on customers' past expenditures, or aggregation of

¹⁶⁴ Kalt Decl. ¶ 43.

¹⁶⁵ *Triennial Remand Review Order* ¶ 65; Kalt Decl. ¶ 43.

volumes across geographic areas and products—warrants any across-the-board prohibitions by the Commission. On the contrary, the Commission should encourage creative structuring of discounts, not discourage them by concocting nebulous prohibitions concerning how they may be structured.

In analyzing this issue, the Commission should begin by recognizing that, as a general matter, discounts are highly pro-competitive.¹⁶⁶ “Low prices benefit consumers regardless of how those prices are set, and so long as they are above predatory levels, they do not threaten competition.”¹⁶⁷ In particular, term and volume discounts expand consumer choice and ultimately expand demand, thereby increasing consumer welfare.¹⁶⁸ As (now-Justice) Stephen Breyer has explained, a firm’s above-cost price cut “is almost certainly moving price in the ‘right’ direction (toward the level that would be set in a competitive marketplace),” and sound antitrust policy thus “very rarely reject[s] [such] beneficial ‘birds in hand’ for the sake of more speculative (future low-price) ‘birds in the bush.’”¹⁶⁹ Likewise, regulators should intervene in the market to prohibit a discount only if, for antitrust purposes, the discount involves either (i) predatory pricing (involving the sale of goods in a competitive market below average variable cost, for the purpose of excluding competitors, with the prospect for later recoupment after competition is driven out) or (ii) an illegal tying arrangement.

There is no plausible claim here of either predatory pricing or tying. No party has complained that price-cap LECs’ special access prices are too low in any market or for any

¹⁶⁶ See Kalt Decl. ¶¶ 46-48.

¹⁶⁷ *Brooke Group Ltd. v. Brown & Williamson Tobacco Corp.*, 509 U.S. 209, 223 (1993)(quoting *Atlantic Richfield Co. v. USA Petroleum Co.*, 495 U.S. 328, 340 (1990)).

¹⁶⁸ Kahn and Taylor Decl. at 30; Kalt Decl. ¶¶ 46-47, 49.

¹⁶⁹ *Barry Wright Corp. v. ITT Grinnell Corp.*, 724 F.2d 227, 234 (1st Cir. 1983).

product; rather, the allegation is that prices are too high. Also, there can be no “tying” claim unless the buyer is required to take one product (or pay a commercially unreasonable price for it) in order to obtain another.¹⁷⁰ But here all of the volume discount plans in question are wholly optional.¹⁷¹ There is no suggestion that any price-cap LEC has *required* a customer to purchase a competitive special access service as a condition of purchasing an alleged “non-competitive” service. Nor is there any serious claim that any price-cap LEC has offered a less competitive service at prices so exorbitant as to constitute an effective refusal to sell it separately from a more competitive service.

To the contrary, the only harm to be feared from the resolution of this issue is the prospect that, by adopting hazy restrictions on discount structures, the Commission’s own rules will deter providers from offering discounts in the first place, and thereby from “moving price in the ‘right’ direction” for consumer welfare. In particular, as SBC’s expert economists have earlier explained, such restrictions would harm consumers by denying them both the direct economic benefit of any such offerings and the indirect benefit of the responses they compel from competitors.¹⁷² For over 20 years the Commission has embraced the benefits of volume discounts, observing that they allow carriers to “meet[] competition and thereby promote[] reasonable rates for all users.”¹⁷³

¹⁷⁰ See, e.g., *Jefferson Parish Hosp. Dist. No. 2 v. Hyde*, 466 U.S. 2, 12 (1984); *Times-Picayune Publ’g Co. v. United States*, 345 U.S. 594, 605 (1953).

¹⁷¹ See Kalt Decl. ¶ 50; Casto Decl. ¶ 60.

¹⁷² See Kahn and Taylor Decl. at 30.

¹⁷³ Report and Order, *Private Line Rate Structure and Volume Discount Practices*, 97 F.C.C.2d 923, 947 ¶ 39 (1984) (“*Volume Discount Order*”).

Moreover, far from evidencing anticompetitive “exclusionary” conduct, volume and term discounts, in all of their different varieties, in fact demonstrate that special access markets are only getting more competitive, for they are exactly the sort of creative pricing plans that one expects to see and does see in competitive markets.¹⁷⁴ For example, [BEGIN

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INFORMATION] alone have offered [BEGIN CONFIDENTIAL INFORMATION]

[END CONFIDENTIAL INFORMATION] contracts with minimum annual revenue commitments to their customers in the highly competitive market for long distance and business services.¹⁷⁵ If there were anything anticompetitive about discount plans featuring revenue commitments, they would not be offered in such competitive markets. Likewise, in the special access market, SBC has offered discounts *in response to*, not in spite of, customer demand. As we show in Mr. Casto’s declaration, SBC has frequently needed to discount services aggressively in order to retain current business or win new customers, and SBC has routinely *lost* bids to competitors even though it offered customers aggressive discounts.¹⁷⁶

¹⁷⁴ See Kalt Decl. ¶¶ 46-47, 49.

¹⁷⁵ See Casto Decl. ¶ 73. [BEGIN CONFIDENTIAL INFORMATION]

[END

CONFIDENTIAL INFORMATION] See *id.*

¹⁷⁶ See *id.* ¶¶ 66, 67. SBC has likewise sought to compete effectively in the marketplace through the use of pricing flexibility contracts. To date, SBC has developed and proposed approximately 283 such contracts tailored to meet the needs of specific customers, including IXCs, wireless providers, CLECs, and large retail customers. See *id.* ¶ 65. More than [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] percent of these contract tariffs have been developed over the past [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION], as SBC has faced an increasingly competitive marketplace driven by aggressive offerings from traditional and intermodal competitors. See *id.* These contract tariffs vary in their scope, covering a single

In addition, volume discounts, including those subject to early termination and shortfall penalties or minimum annual volume requirements based on a customer's prior expenditures ("past-spend requirements"),¹⁷⁷ allow price-cap LECs to compete for the business of smaller customers on a level playing field with their unregulated wholesaler rivals.¹⁷⁸ This goal comports with prior Commission decisions embracing special access volume discounts that "benefit large *as well as small users*,"¹⁷⁹ and volume tariffs that do not unreasonably disadvantage small carriers vis-à-vis large carriers.¹⁸⁰ By their nature, pure wholesale volume discounts favor larger customers that have qualifying levels of demand, and generally mean that

MSA, multiple MSAs, or SBC's entire service territory. *See id.* They offer significant discounts of [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] off SBC's basic schedule for special access services ranging from DS1s to OC-192s. *See id.*

¹⁷⁷ SBC, like other price-cap LECs, has tariffed volume and discount plans with certain of these contested provisions. SBC's Managed Value Plan ("MVP"), for example, is a five-year plan that requires a minimum annual revenue commitment ("MARC") of 100 percent of the customer's purchases during the three months prior to entering MVP, annualized. The MARC may be increased during the term of the MVP, but it may not be decreased. In addition, the MVP requires that customers purchase 95% of the access-like services they acquire from SBC out of SBC's interstate access tariffs. *See id.* ¶¶ 59-60. Neither the MVP nor any other SBC plan is a so-called "growth" discount plan, which the Commission has defined as a pricing plan "under which incumbent LECs offer reduced per-unit access service prices to customers that commit to purchase a certain percentage *above* their past usage." *Pricing Flexibility Order* at 14294 ¶ 134 (emphasis added). SBC's plans do not fall into this class of discount plans, as they require the commitment of a volume that is the *same or less* than past usage.

¹⁷⁸ *See* Casto Decl. ¶ 62.

¹⁷⁹ *See Volume Discount Order* at 948 ¶ 40 (emphasis added). This order also emphasized that volume discounts "should not restrict the availability of any offering or volume to particular customers." *Id.* at 949 ¶ 41.

¹⁸⁰ *See, e.g.,* Memorandum Opinion, Order, and Authorization, *Joint Application for Authorization Pursuant to Section 214 of the Communications Act of 1934, as amended, to Construct, Acquire, and Operate Capacity in a Digital Submarine Cable System, the COLUMBUS-III Cable System*, 14 FCC Rcd 13436, 13440 ¶¶ 12-13 (1999) ("*Joint Application Order*") (rejecting a challenge to a volume discount as unreasonable because "there is nothing in the [agreement] that prevented smaller carriers from . . . obtaining the volume discounts offered for large investments.").

smaller customers receive smaller discounts (or no discounts at all).¹⁸¹ However, by basing each customer's volume commitment on the customer's prior demand, a LEC supplier can minimize or eliminate the difference in discounts offered to small and larger customers.¹⁸² Were the Commission to issue a rule allowing price-cap LECs to offer *only* pure volume discounts, it would severely impair the LECs' ability to attract and retain the business of smaller customers, because smaller customers would be unable to qualify for high (or even substantial) volume discounts.¹⁸³ As XO Communications recently made clear to the Commission, "[f]or commercial negotiations to be successful, carrier-customers like XO must have the flexibility to negotiate deals that combine price concessions and non-price terms reflecting the carrier's individualized needs."¹⁸⁴ Given the increasing competition the price-cap LECs face in the

¹⁸¹ See *Joint Application Order* at 13440 ¶¶ 12-13; Third Memorandum Opinion and Order on Reconsideration and Supplemental Notice of Proposed Rulemaking, *Transport Rate Structure and Pricing*, 10 FCC Rcd 3030, 3078 ¶ 105 (1994) (temporarily prohibiting volume discounts "in order to ensure that the short-term impact on *small IXCs* was manageable and to allow IXCs to adjust to rate changes under the interim rate structure") (emphasis added); Report and Order and Notice of Proposed Rulemaking, *Expanded Interconnection with Local Telephone Company Facilities; Amendment of Part 69 Allocation of General Support Facility Costs*, 7 FCC Rcd 7369, 7458 ¶ 188-89 (1992) ("*Special Access Expanded Interconnection Order*"); *Volume Discount Order* at 947 ¶ 38; Casto Decl. ¶ 67.

¹⁸² See Casto Decl. ¶ 62.

¹⁸³ See *id.* The Commission recently held in *AT&T Corp. v. BellSouth Telecoms., Inc.*, 19 FCC Rcd 23898 (2004), that a BellSouth volume-discount tariff violated section 272 on the theory that it improperly discriminated in favor of BellSouth's long distance affiliate, which was small and rapidly growing, and against unaffiliated providers with large and mature market shares. The *BellSouth Order* is under appeal, and SBC does not support its reasoning. Nonetheless, the reasoning of the *BellSouth Order* explicitly rested on the size and projected growth of BellSouth's long distance affiliate, and it would not necessarily extend to other BOCs and their affiliates. More generally, nothing in the *BellSouth Order* purported to address the reasonableness of any discount structure under sections 201 and 202 of the Communications Act.

¹⁸⁴ Letter from Christopher McKee, XO Communications, Inc., to Marlene H. Dortch, Secretary, FCC, WC Docket No. 04-313, at 2 (filed May 11, 2005) (emphasis in original).

special access market, it would be unfair to tie their hands and preclude their ability to respond to this market demand.

Discounts combined with past-spend requirements also serve a number of additional legitimate business objectives for the LECs. First, such discount plans give LECs the sort of revenue assurances and stability needed in any market characterized by immense sunk costs.¹⁸⁵ The Commission has long recognized that term discounts provide efficiencies associated with the certainty of long-term arrangements.¹⁸⁶ Volume (and term) discounts with past-spend requirements achieve this same objective. Revenue assurances and stability help keep LECs' cost of capital low, a benefit LECs are willing to pay for with greater discounts.¹⁸⁷ And they allow LECs to make the sunk investments necessary to build, maintain, and upgrade their networks to meet expected demand with greater assurance that those investments will not be stranded if demand shifts unexpectedly.¹⁸⁸

Finally, any rule discouraging *region-wide* and *cross-product* discounts, on the theory that such discounts improperly "aggregate" competitive and less competitive services, would be unwise.¹⁸⁹ These types of discounts benefit customers by allowing them maximum flexibility in meeting volume commitments, notwithstanding churn and changing usage patterns by their own retail customers.¹⁹⁰ At the same time, they provide price-cap LECs with added revenue stability

¹⁸⁵ See Kalt Decl. ¶ 48; Casto Decl. ¶ 61.

¹⁸⁶ See *Special Access Expanded Interconnection Order* at 7469 ¶ 199.

¹⁸⁷ See Kalt Decl. ¶ 48; *see also* Casto Decl. ¶ 61.

¹⁸⁸ See *id.*

¹⁸⁹ See Kalt Decl. ¶ 64.

¹⁹⁰ See Casto Decl. ¶ 72 .

amid changing market conditions.¹⁹¹ A rule discouraging such discounts would unduly interfere with efforts of market participants to reach mutually satisfactory agreements for special access services. Far from eschewing global pricing agreements that encompass different geographic and product markets, SBC's customers *demand* them.¹⁹² Indeed, SBC's wholesale customers actively seek to negotiate global contracts covering a variety of services and areas in exchange for a volume or revenue commitment, so that they have maximum flexibility in accommodating their own customer and network churn.¹⁹³ SBC's customers also can and do leverage their buying power in highly competitive areas and product markets by extracting pricing concessions in areas that are less competitive.¹⁹⁴ Thus, the Commission has no reason to conclude that geographic or product "bundling" inherently favors price-cap LECs over customers; the opposite is true at least some of the time and perhaps most of the time.

III. The Commission Should Reaffirm the Basic Tenets of Its Pricing Flexibility and Pricing Rules but Should Make Certain Modifications to Reflect Market Realities.

The *Pricing Flexibility* and *CALLS* orders have created a market-friendly transitional regime that makes abundant economic sense, has received the full approval of the D.C. Circuit, and has withstood the test of time. That regime has properly balanced the long-term goal of full special access competition, the shorter-term interests of consumers, and the logistical realities of managing such a complex market. It has allowed—and indeed spurred—the development of intramodal and intermodal competition at all levels of the special access market nationwide.

¹⁹¹ See *id.*

¹⁹² See *id.* ¶¶ 70-72.

¹⁹³ See *id.* ¶ 72. For example, the wholesale customer is able to preserve its global discount even while, in response to a retail customer's request, it replaces low-speed services with high-speed services and adds and deletes circuits. See *id.*

¹⁹⁴ See generally *id.* ¶ 68.

SBC accordingly urges the Commission to maintain the essential components of that regime with certain modifications, noted below, that take account of this increasing competition and permit ILECs to accommodate new market realities.

A. The Commission Should Continue to Rely on Collocation as a Proxy for Competitive Pressures, but Should Provide Phase II Pricing Flexibility for All OCn and Packet-Switched Services.

The Commission adopted, and the D.C. Circuit upheld, use of collocation triggers as a proxy for irreversibly competitive conditions in a given market.¹⁹⁵ The evidence discussed above shows the accuracy of the proxy, as SBC has witnessed strong competitive entry in every market where Phase II triggers have been met. Indeed, as explained in Part I(A), the triggers significantly *understate* the level of competition within an MSA by ignoring non-collocation-based competition. For instance, as Mr. Casto explains, the triggers fail entirely to account for competitors in the El Paso MSA (an area where SBC has only limited pricing flexibility), yet the evidence shows that there are at least [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] competitors that have deployed alternative fiber networks in that market and utilize “carrier hotels” to interconnect with one another and compete throughout the MSA.¹⁹⁶ And in Dallas/Fort Worth, SBC has not obtained full Phase II pricing flexibility even though it is competing with carriers operating out of [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] carrier hotels, and

¹⁹⁵ *WorldCom*, 238 F.3d at 458-60. As the Commission has explained, “[i]f a competitive LEC has made a substantial sunk investment in equipment, that equipment remains available and capable of providing service in competition with the incumbent, even if the incumbent succeeds in driving that competitor from the market. Another firm can buy the facilities at a price that reflects expected future earnings and, as long as it can charge a price that covers average variable cost, will be able to compete with the incumbent LEC.” *Pricing Flexibility Order* at 14264 ¶ 80.

¹⁹⁶ Casto Decl. ¶ 34.

even though a substantial majority of SBC's DSn-level demand is within easy reach of competitive fiber.¹⁹⁷ The triggers similarly do not pick up the substantial competition from intermodal competitors, such as cable operators and fixed wireless providers, throughout SBC's region. Nevertheless, SBC is not seeking to have the pricing flexibility triggers overhauled completely. As long as the Commission grants downward pricing flexibility (as discussed below), leaving the conservative triggers in place for DSn services will serve the protective purpose intended by the Commission without unduly hampering ILECs' ability to compete.

At the same time, the triggers should be immediately eliminated for OCn-level and packet-switched services, which should be declared eligible for Phase II pricing flexibility immediately for all areas, nationwide. No proxy is necessary to establish the competitiveness of these services, for the Commission has already found that they are subject to competitive entry everywhere. As described above, the *Triennial Review Order* found abundant "[r]ecord evidence reflect[ing] competitive deployment of loops at the OCn level."¹⁹⁸ That evidence showed that competitors can economically deploy such services even in Tier II and III MSAs.¹⁹⁹ Competitive carriers now control the *majority* of the OCn business, after all.²⁰⁰ Likewise, packet-switched services are nationally competitive. Cable companies, not LECs, lead the mass market for broadband services,²⁰¹ and "a wide range of competitors are actively deploying their own packet switches" in the wholesale data market.²⁰² There is thus no plausible basis for suggesting that

¹⁹⁷ *Id.* ¶ 35.

¹⁹⁸ *Triennial Review Order* at 17168 ¶ 315.

¹⁹⁹ *Id.*

²⁰⁰ Casto Decl. ¶ 7.

²⁰¹ *USTA I*, 290 F.3d at 429.

²⁰² *Triennial Review Order* at 17321-22 ¶ 538.

any incumbent LECs can exercise market power over this service in *any* MSA. In each of these cases, competition, rather than regulation, should be trusted to set the prices for these services.

B. The Commission Should Provide the BOCs with Phase I Price Flexibility in All MSAs to Allow for Multi-Region Customer Discounts.

The Commission correctly notes that pricing flexibility is warranted when “the costs of delaying regulatory relief outweigh[] the risks of granting relief too soon.”²⁰³ Restricting the ability of price-cap LECs to lower their prices skews the market and disserves customers while providing no countervailing benefits. And granting the LECs such downward pricing flexibility would pose no serious risk of anticompetitive harm. Indeed, as noted below, even those parties that otherwise propose re-regulation of the special access market advocate extending Phase I downward pricing flexibility to all MSAs.

SBC’s customers frequently express frustration at not being able to leverage their wide-ranging business to obtain multi-regional discounts from the price-cap LECs. These customers want the same flexibility from SBC as they get from its competitors: the ability to contract for all levels of special access services in all regions on consistent and favorable terms.²⁰⁴ But in the absence of broad downward pricing flexibility, SBC instead has to craft elaborate contracts that offer discounted rates where available and notify customers that they must pay price-cap rates in certain MSAs and for certain services. And these constraints are particularly unfair and counterproductive in areas where intermodal competitors, whose entry does not trigger pricing flexibility, stand ready to serve those customers.

²⁰³ Notice at 2002 ¶ 18 (citing *Pricing Flexibility Order* at 14297-98 ¶ 114).

²⁰⁴ Casto Decl. ¶ 71.

As universal downward price flexibility can only lower average prices, consumers face little risk of harm. The Commission initially justified restrictions on downward flexibility to avoid “exclusionary pricing behavior,” but aimed to lift those restrictions once it was clear that “efforts to exclude competitors are unlikely to succeed.”²⁰⁵ Price-cap LECs could not now possibly succeed in such practices because, among other factors, they could not recoup the profits forgone in any predatory pricing scheme. In particular, even if a LEC could manage to drive special access competitors out of the market by charging below-cost prices, and even if competitors could not be expected to reenter the market once those prices were raised, existing price caps would preclude the LEC from recouping its lost profits with supracompetitive new rates.²⁰⁶ And without the ability to recoup, “the incumbent will be worse off than if it had not engaged in exclusionary pricing behavior.”²⁰⁷ In any event, strong non-collocation-based competition from CLECs, cable, and fixed wireless providers now ensure competitive pricing in formerly underserved areas where the existing collocation-based triggers do not reflect the full level of competition.

Indeed, some parties otherwise diametrically opposed to the BOCs’ positions concerning special access pricing nevertheless support complete downward flexibility. In a 2004 position paper, the Ad Hoc Telecommunications Users Committee argued that “[d]ownward pricing flexibility provides a *self-executing regulatory device* that will automatically assure the appropriate regulatory treatment of ILEC rates without the need to assess the extent to which

²⁰⁵ *Pricing Flexibility Order* at 14262 ¶ 77.

²⁰⁶ Kalt Decl. ¶ 65.

²⁰⁷ *Pricing Flexibility Order* at 14264 ¶ 80.

actual and effective competition is present with respect to any particular ILEC service.”²⁰⁸

Likewise, the Commission itself has noted that “granting the LECs greater downward pricing flexibility should promote, not hamper, the development of competition,” for “[a]llowing LECs to set their prices at levels closer to economic cost will invite new entry by firms that are at least as productive as the incumbents, which is the condition for economically efficient entry.”²⁰⁹

Whatever its decision on Phase II relief, the Commission should allow price-cap LECs to lower prices wherever competition demands it.

C. The Commission Should Restructure the Special Access Basket to Contain Two Service Categories: (i) DS3 & Below End User Channel Terminations and (ii) All Other DS3 & Below Service Components

SBC recommends that the Commission update and simplify the price-cap basket structure for special access services. The existing basket structure has been in place unchanged since the Commission’s initial *LEC Price Cap Order*. The rules no longer correspond to the realities of the special access market, nor do they conform in any way with the pricing flexibility framework established in the *Pricing Flexibility Order*.

Under the existing rules, the Special Access basket is composed of four service categories: Voice Grade, WATS, Metallic services; Audio & Video services; Wideband Data & Analog services, and; High Capacity & DDS services. The “High Capacity & DDS” service category, which houses the vast majority of SBC’s total price-cap special access demand and revenues, is further subdivided into separate “service subcategories” for DS1 and DS3 services. The inclusion of all these service categories is one of the most obvious examples of how

²⁰⁸ Competition in Access Markets: Reality or Illusion, A Proposal for Regulating Markets, at 10, available at http://www.comptelascent.org/public-policy/position-papers/documents/eti_access_markets_aug2004.pdf. (emphasis in original).

²⁰⁹ *LEC Price Cap Review Order* at 9140-41 ¶ 410.

disconnected the price cap rules have become from marketplace realities. For example, SBC's regional LECs have never had any demand for services in the "Wideband Data & Analog" service category since price cap regulation was initially adopted in 1990. There is no reason to maintain this service category in the special access price cap basket. To the contrary, the rules should be updated to eliminate the category altogether.²¹⁰

Other adjustments are also in order. To begin with, the Commission should authorize the removal of any remaining OCn-level demand and revenues from the price-cap baskets. As discussed above, OCn-level services (as well as packet-switched services, which already are outside of price cap regulation²¹¹), are subject to robust competition (and potential competition), and the Commission accordingly should grant the equivalent of Phase II pricing flexibility for all these services.

The remaining service categories should be consolidated and divided as follows:

- A separate service category should be created for "DS3 & below Channel Termination to End Users."
- An "All Other" service category would house all remaining portions of VG-and-below DDS, DS1, and DS3 special access services, eliminating the need for any separate baskets or subcategories.

This approach best reflects marketplace realities by grouping together those price cap services that face the most similar competitive conditions, and it more closely aligns the special access basket structure with the existing pricing flexibility framework. Specifically, it separates out (i)

²¹⁰ Eliminating this service category would have no impact on the basket level PCI/APIs.

²¹¹ SBC does not include its two packet-switched services (BPON and OPT-E-MAN) offered by its LECs in price caps, although it had sought a waiver to permit it to do so. *See SBC Communications Inc. Petition for Waiver Expedited Treatment Requested, SBC Communications Inc. Petition for Waiver of Section 611.42 of the Commission's Rules*, at 1, filed Dec. 9, 2003. The Commission's adoption of the proposal we make here would supersede and moot that waiver request, which SBC then would withdraw.

DS3-and-below channel terminations to end users, for which entry (at least from an intramodal perspective) is most challenging, from (ii) DS3-and-below transport, which presents competitors with greater revenue opportunities and economies of scale. And it groups within the same baskets those services that are subject to the same pricing flexibility triggers.²¹² Additionally, isolating end user channel termination services (which have been subject to particular focus by other parties in this proceeding) into a separate and distinct service category has the effect of acting as a competitive safeguard.

In short, this approach is simpler and more streamlined than the existing, outmoded regime, and more in keeping with the regulatory scheme and the marketplace. The Commission always has indicated that it "expect[s] to continue to modify the structure of LEC price cap baskets to reflect the introduction of new services and the development of competition[.]"²¹³ It should do so now. This proposal fully satisfies the criteria the Commission has announced for grouping services into price baskets: it groups together in price baskets "services with similar levels of competition,"²¹⁴ as well as services that are technologically similar and that are

²¹² This proposal also eliminates the need for the separate Voice Grade, WATS, Metallic services and Audio & Video services categories. Those categories include services with facility characteristics similar to those of DS_n services. Additionally, services in these two categories are mostly analog-based services for which demand has continued to decline in favor of digital-based offerings. This structure would place those components of such services that share attributes similar to DS3-and-below end-user channel terminations in the new "DS3 & below Channel Termination to End Users" basket, and the remaining components in the "All Other" category, which is a simpler means of grouping technologically similar services.

²¹³ *LEC Price Cap Review Order* at 9141 ¶ 412.

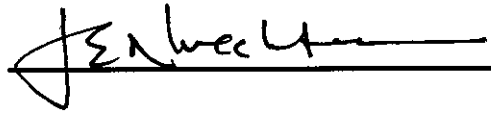
²¹⁴ See, e.g., Notice of Proposed Rulemaking, *Price Cap Performance Review for Local Exchange Carriers*, 9 FCC Rcd 1687, 1688-89 ¶ 12 (1994) ("1994 Price Cap NPRM"); Order, *AT&T Communications Elimination of Reporting Requirements*, 7 FCC Rcd 5568, 5568 ¶ 3 (1992) ("AT&T Reporting Reqs. Order").

purchased by similar customers.²¹⁵ As the Commission has found, this approach protects customers by reducing supposed opportunities for cross-subsidization.²¹⁶

CONCLUSION

The Commission should amend its price cap/pricing flexibility regime in the respects described above, and should more generally stay the deregulatory course by relying on market forces, rather than government intervention, to shape the future of special access services.

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June 13, 2005

²¹⁵ See, e.g., Further Notice of Proposed Rulemaking, *Price Cap Performance Review for Local Exchange Carriers; Treatment of Video Dialtone Services Under Price Cap Regulations*, 10 FCC Rcd 3141, 3148-49 ¶¶ 10-11 (1995).


²¹⁶ See, e.g., *id.*; 1994 *Price Cap NPRM* at 1688-89 ¶ 12; *AT&T Reporting Reqs. Order* at 5568 ¶ 3; Second Report and Order, *Policy and Rules Concerning Rates for Dominant Carriers*, 5 FCC Rcd 6786, 6788 ¶ 13 (1990).

Certificate of Service

I, Mary Beth Caswell, do hereby certify that true and accurate copies of the foregoing REDACTED PUBLIC VERSION of the Comments of SBC Communications Inc. were served by hand delivery via courier this 13th day of June, 2004, upon:

Marelene Dortch, Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

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Mary Beth Caswell

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	
Special Access Rates for Price Cap Local)	WC Docket No. 05-25
Exchange Carriers)	
)	
AT&T Corp. Petition for Rulemaking to Reform)	
Regulation of Incumbent Local Exchange Carrier)	RM-10593
Rates for Interstate Access Services)	
)	

**DECLARATION OF PARLEY C. CASTO
ON BEHALF OF SBC COMMUNICATIONS INC.**

I. WITNESS IDENTIFICATION AND QUALIFICATIONS

1. My name is Parley C. Casto. I am the Executive Director – Industry Markets Special Access Product Management for SBC. I am responsible for product management, product development, rate development, policy development, and tariff management for the wholesale special access business of SBC on an enterprise-wide basis.

2. I previously served as Director of various other product management organizations within SBC. In those positions, I supervised product management teams responsible for switched access, advanced data services, and certain transport (special access and unbundled network element) product management teams. I also was responsible for SBC enterprise-wide product development, rate development, and company policy for these products.

3. I began working for Illinois Bell Telephone Company in 1992 in the network services organization in Chicago, Illinois. Since then I have held a variety of positions in network construction, fiber optic engineering, and product management.

4. I received my BA from DePaul University in Chicago, Illinois in 1999 and my MBA from DePaul University in 2002. I also earned a Telecommunications Certificate on telecommunications traffic management and engineering from DePaul University's School of Computer Science, Telecommunications and Information Systems.

II. PURPOSE AND SUMMARY OF DECLARATION

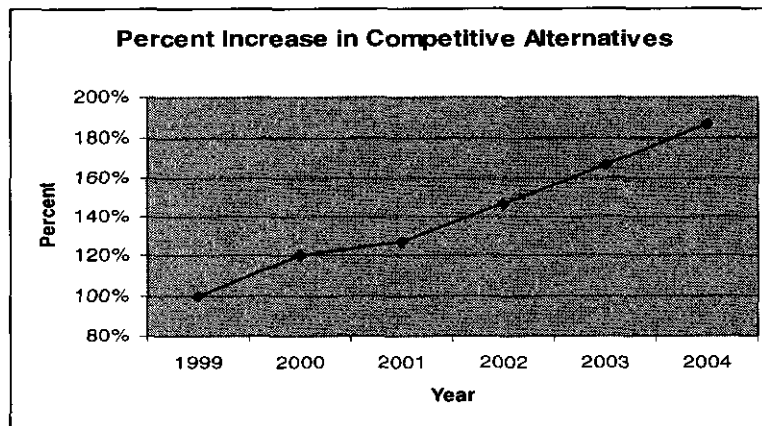
5. The purpose of this declaration is to describe the stiff competition SBC faces in the special access market from a variety of sources, including existing wireline and intermodal competitors, and the increasing competitive threat posed by new entrants using technologies—such as WiMAX—that can provide reliable, high-capacity services at a fraction of the cost of traditional wireline carriers, as well as the ways in which SBC has responded to this competition to acquire and retain customers in this increasingly competitive marketplace.

6. As detailed in my prior declarations before the Commission in the *Triennial Review Remand Proceeding*,^{1/} SBC has confronted increasingly robust competition in the special access market for several years. Traditionally, this competition has come from a variety of facilities-based carriers that rely on self-deployed and/or third party facilities, and others that rely on a combination

^{1/} Declaration of Parley C. Casto on Behalf of SBC Communications Inc., filed in WC Docket No. 04-313, CC Docket No. 01-338, Oct. 1, 2004; Reply Declaration of Parley C. Casto on Behalf of SBC Communications Inc., filed in WC Docket No. 04-313, CC Docket No. 01-338, Oct. 19, 2004.

of such alternative facilities and SBC's special access services.^{2/} These competitors have been building their networks for decades, and now have deployed facilities in markets representing the vast majority of SBC's special access revenues. In MSAs in which SBC has received Phase II pricing flexibility, for example, the number of active competitors has nearly doubled on average since 1999, as shown below.^{3/}

Figure 1



7. As might be expected, these competitors focused initially on the highest capacity, highest revenue customers, and thus have succeeded in winning the lion's share of the market for the highest capacity, OCn-level services. But competition from these competitors has not been limited only to SONET services; it also has extended to lower capacity, DS3 and DS1 services, including stand-alone DS1 services.^{4/}

^{2/} The ability of these CLECs to successfully compete with SBC for special access customers, at least in part through their purchases of SBC's special access services indicates that such competition may be virtually unbounded.

^{3/} See supporting data, *infra*.

^{4/} While SBC does not have firm market share data regarding the percentage of DS1s and DS3s served by competing carriers, evidence previously submitted in the *Triennial Review Remand* and other Commission proceedings makes clear that CLECs have continued to win a large and

8. Competition in the special access market has begun to accelerate dramatically with increasingly vigorous entry by cable operators, which have deployed fiber extensively in areas where small and medium-sized businesses are concentrated, and fixed wireless providers, including providers of WiMAX service (like TowerStream), which have initiated commercial offerings of DS1 (and higher) replacement services that have quality of service guarantees that equal those of wireline carriers, but at a fraction of the cost and with minimal installation intervals.^{5/}

9. SBC has responded, and continues to respond, to this competition by lowering the price its customers pay for special access services, and offering a variety of innovative pricing plans, including individually-negotiated contract tariffs, designed to meet the specific needs of its customers. These offers include MSA-specific plans and, as many of SBC's customers have demanded, comprehensive, region-wide, and SBC-wide discount plans that offer customers discounts across a broad-range of services in return for making certain revenue commitments.

10. Based on comments raised in the *Triennial Review* and *Triennial Review Remand* proceedings, I expect that some parties here will contend that SBC's discount plans and contract tariffs that span various MSAs and capacity levels are anticompetitive, and enable SBC to leverage its purported market power in markets with less competitive entry into markets with more competitive alternatives. That claim is specious. First, SBC has offered such plans in response to

increasing number of special access customers at capacities of DS3 and DS1. SBC Communications Inc. Reply Comments filed in WC Docket No. 04-313, Oct. 19, 2004, at 5, 31-34 ("SBC Reply Comments") and Attach. B, Joint Declaration of Scott J. Alexander and Rebecca L. Sparks on Behalf of SBC Communications Inc., filed in WC Docket No. 04-313, Oct. 19, 2004, at ¶ 21 ("Alexander/Sparks Decl.").

^{5/} TowerStream Service Level Agreement, available at <http://www.towerstream.com/content.asp?sla> ("TowerStream Service Level Agreement").

customer demand, not as a means to force unwilling customers to purchase its services in markets with the most competitive alternatives. Indeed, our customers constantly express frustration that the Commission's current pricing flexibility rules inhibit SBC's ability to offer *more* comprehensive deals that would provide customers even greater benefits (i.e., discounts) through contract tariffs that cover all SBC geographic markets and products. Second, the notion that SBC leverages the extensive coverage of its network into commitments from customers to purchase special access from SBC in the most competitive areas is exactly backwards. Rather, customers negotiating region-wide or SBC-wide deals with SBC insist on price- and non-price-related concessions in areas with fewer competitive alternatives in exchange for giving some of its most hotly contested business to SBC in those markets with the most competitive alternatives. They can do so because much of their demand is in the highest capacity services or in those dense metropolitan areas where competition is stiffest. If SBC refused to agree to these concessions, its high-capacity facilities or facilities in urban and suburban areas would be severely underutilized. Thus, the extremely competitive nature of these special access facilities safeguards against any perceived pricing power SBC might otherwise have elsewhere in the special access market.

III. COMPETITIVE PRESSURES ON SBC'S PROVISION OF WHOLESALE SPECIAL ACCESS SERVICES

11. SBC faces increasingly robust competition in the special access market from a variety of competitors. These competitors rely on self-deployed and third-party facilities, SBC's special access services, or a combination of SBC special access services and competitive facilities.^{6/}

^{6/} Indeed, the vast majority of SBC's special access revenues are derived from wholesale customers (*e.g.*, 90 percent of its DS1, 93 percent of its DS3, and greater 80 percent of its OCn revenues), who use SBC's services to compete with SBC for both retail and other wholesale customers.

As I show here, a significant amount of this competition is not captured by the existing pricing flexibility triggers. Thus, while SBC faces very real competition in every MSA where it has obtained Phase I or Phase II pricing flexibility, there is a significant amount of competition today that is *not* captured by the collocation-focused pricing flexibility triggers, because the competitors that are the source of that competition bypass the ILEC network partially or entirely. For example, “carrier hotels,” which allow multiple competitive carriers to connect directly to end-user lit buildings or to ILEC central offices over common facilities without the need to establish their own fiber-based collocation in SBC offices, have sprung up all over SBC territory. Likewise, the amount of competitive fiber that is unaccounted for under existing triggers inevitably has increased. Moreover, *intermodal* competition that is not captured by the triggers is a growing and important source of competition that already is responsible for significant competitive losses by SBC.^{7/}

A. Alternative Fiber has been Widely Deployed, and Readily Could be Extended to Meet Demand.

12. Demand for special access services is highly concentrated in a relatively small number of dense urban wire centers and ex-urban wire centers containing office parks and other campus environments. Indeed, more than [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] percent of SBC’s special access demand in Phase II MSAs is concentrated in [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] percent of its wire centers. To meet this demand, competitors have deployed myriad alternative fiber facilities—including fiber directly connected to

^{7/} As discussed below, [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] of SBC’s retail DS1s lost to competitors are lost to cable operators, which are relatively new entrants to the special access market.

end-user premises—in markets across SBC's territory, particularly in dense, metropolitan areas and large campus environments. And while competitors have not built out to *every* end user location, their existing fiber networks generally are close enough to most of the businesses and other customers that use high-capacity services that it would be simple enough for them to reach those locations if demand warranted. Using these facilities (in some cases in combination with SBC high-capacity facilities purchased either as special access or as unbundled network elements),^{8/} competitors provide a variety of high-capacity services—including DS1, DS3 and higher capacity services—to retail and wholesale customers in competition with SBC's special access services.

13. As the Commission previously has recognized, competitive carriers routinely build out their networks to provide OCn-level services.^{9/} At those capacities, the Commission found, the revenue opportunity justifies deployment of alternative facilities.^{10/}

^{8/} SBC notes, in this regard, that most of the stand-alone DS1 special access circuits it provisions are provided over copper loops, and that, under the Commission's unbundling rules, ILECs must make available two-wire and four-wire copper loops and conditioned, DSL-capable copper loops. As a consequence, competitors may provide high-capacity dedicated circuits using DSL, or may purchase copper loops to which they may attach their own electronics to provide DS1 services.

^{9/} Report and Order and Order on Remand and Further Notice of Proposed Rulemaking, *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, Deployment of Wireline Services Offering Advanced Telecommunications Capability*, 18 FCC Rcd 16978, 17168 ¶ 315 (2003) ("Triennial Review Order"), vacated in part sub nom. *United States Telecomms. Ass'n v. FCC*, 359 F.3d 554 (D.C. Cir. 2004), cert. denied, *National Ass'n of Regulatory Utility Comm'rs v. United States Telecomms. Ass'n*, 538 U.S. 940 (2004), on remand, Order on Remand, *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, WC Docket No. 04-313, CC Docket No. 01-338, FCC No. 04-290 (rel. Feb. 4, 2005).

^{10/} *Id.* ("Record evidence reflects competitive deployment of loops at the OCn level and competitive carriers confirm they are often able to economically deploy these facilities to the large enterprise customers which use them.").

14. But competitors are not only deploying alternative fiber facilities at OCn-level capacities. As detailed in SBC's reply comments in the *Triennial Review Remand Proceeding*, other carriers conceded in state *Triennial Review* proceedings that they can and do build out their alternative facilities to serve not only DS3, but also DS1 demand.^{11/} That is not surprising because, as we show, there is so much competitive fiber in the ground that it is relatively simple and cost effective to build out even to serve DS1- and DS3-level demand from fiber that already is in the ground nearby. Table 1, for example, demonstrates that a substantial percentage of DS1 and DS3 demand exists less than 1000 feet (or within approximately three blocks) from known competitive fiber in ten representative MSAs.^{12/}

^{11/} SBC Reply Comments at 5, 31-34; Alexander/Sparks Decl. at ¶ 21.

^{12/} The data in Table 1, and in the fiber maps and demand charts attached to my affidavit, are based on known CLEC fiber that has been identified and mapped by GeoTel, a telecommunications research and geographic information systems mapping firm, which was engaged by SBC to identify the location of competitive fiber. GeoTel uses several sources to compile and verify deployment information. First, it obtains that information from many fiber owners, which provide GeoTel that information so that GeoTel can assist them in locating buyers. Second, GeoTel traces fiber routes by putting its feet on the street and identifying fiber access manholes and using global positioning systems (GPS) to map the location of fiber facilities. Third, GeoTel searches public records (such as construction permits) to identify where fiber has been deployed. GeoTel uses the information from all these sources not only to identify where fiber has been deployed, but also to cross-check each source. Thus, the alternative fiber identified by GeoTel unquestionably exists. But even with all these sources, there often is other fiber that has not yet been identified and mapped by GeoTel. In fact, there are numerous wire centers throughout SBC territory where CLECs have obtained fiber-based collocation and where fiber thus unquestionably exists but which has not been identified by GeoTel. Moreover, GeoTel does not count fiber deployed by cable operators. If anything, Table 1 and the fiber maps attached hereto significantly understate the extent of competitive fiber deployment in SBC's territory.

Table 1

[BEGIN CONFIDENTIAL INFORMATION]

[END CONFIDENTIAL INFORMATION]

15. While there is no particular magic to the 1000-foot distance, our analysis suggests that it would be relatively inexpensive and wholly cost effective for a competitor to extend a fiber drop 1000 feet to access DS1 or DS3 demand and then rely on existing, competitive fiber for the rest of the route. The cost for a competitor to extend 1000 feet of fiber to access this demand, including any construction, splicing, inter-duct, and testing (assuming there is available bandwidth on the existing competitive fiber) ranges from approximately [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] on average if conduit already exists up to approximately [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] on average in downtown areas where conduit does not exist. And since most DS1 and DS3 demand in dense downtown areas would be fairly centralized, this one-time investment would be a highly cost-effective means of serving many potential customers. Thus, existing competitive fiber deployment represents not only actual, but very real potential, competition for SBC's special access business.

16. The fiber maps attached to this Declaration as Attachment 1 also depict, for several representative MSAs in SBC's territory, alternative fiber routes where GeoTel can confirm that CLECs have deployed alternative fiber facilities, as well as the identities of the competitive carriers that have deployed such fiber in each MSA. In addition, the maps depict the wire centers in which competitors have collocated fiber in SBC central offices, and identify the locations of customers purchasing DS1 and DS3 special access services from SBC,^{13/} as well as the locations of carrier hotels (at which, as discussed below, multiple competitive carriers can connect to each other's networks, and, indirectly, to SBC's network). The maps also show the percentage of SBC's DS1 and DS3 demand located within 500, 1000, and over 1000 feet from known competitive fiber. The maps thus graphically illustrate that a substantial percentage (in many cases, the large majority) of SBC's demand could easily be served by existing alternative fiber facilities, and they do so notwithstanding that these maps understate competitive fiber facilities.^{14/} Below, I highlight four of the markets, which represent a cross-section of the different MSAs in SBC's territory.

17. Los Angeles, California. Los Angeles is not only one of the largest of SBC's MSAs geographically (SBC serves 114 wire centers in the MSA), it also is one of SBC's largest MSAs from a business perspective—falling into the top quartile of MSAs in special access sales. As such, it represents an extremely important market in SBC's territory. As the attached maps show, at least

[BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION]

^{13/} The maps do not depict DS1 and DS3 services purchased by SBC's wholly-owned affiliates.

^{14/} In addition to the fiber maps, Attachment 2 shows the percentage of SBC's DS1 and DS3 demand located within 500, 1000, and over 1000 feet from known competitive fiber in 20 additional MSAs served by SBC. These additional data are included to show that the MSAs featured in the maps are representative of SBC's entire service area. As with the maps, the charts do not include DS1 and DS3 services purchased by SBC's wholly-owned affiliates.

different carriers have deployed alternative fiber facilities, and at least one competitive carrier has obtained fiber-based collocation in [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] of the 114 wire centers served by SBC in Los Angeles. In addition, there are [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] known carrier hotels, in which competitive service providers may connect with each other and, indirectly, with SBC, effectively extending the reach of those carriers' facilities. And approximately [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] percent of SBC's DS1 and [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] percent of SBC's DS3 demand lies within 1000 feet of known competitor's fiber.

18. Indianapolis, Indiana. Indianapolis is a mid-size, or Tier II, market in terms of special access sales in SBC's territory. Nevertheless, as the attached maps show, competitors have widely deployed alternative fiber in those wire centers in which most of SBC's special access demand is concentrated. In particular, the maps show that at least [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] different carriers have deployed alternative fiber facilities, and at least one competitive carrier has obtained fiber-based collocation in [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] of the 37 wire centers served by SBC in the MSA. In addition, there are approximately [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] known carrier hotels, and approximately [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] percent of SBC's DS1 and [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] percent of SBC's DS3 demand is located within 1000 feet of known competitive fiber routes.

19. Dallas/Fort Worth, Texas Dallas-Fort Worth is one of the three largest MSAs in SBC's territory, both from a geographic and special access sales perspective. At least [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] carriers have deployed competitive fiber facilities in the MSA, and at least one competitive carrier has obtained fiber-based collocation in [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] of the 87 wire centers in the MSA, which, as the maps show, are where a significant majority of where SBC's special access demand is located. There are [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] known carrier hotels, and approximately [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] percent of SBC's DS1 and [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] percent of SBC's DS3 demand is within 1000 feet of known competitive fiber routes.

20. Madison, Wisconsin. Madison is one of the smaller MSAs within SBC's territory geographically and with respect to special access sales. SBC has identified the alternative fiber routes of [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] deployed alternative fiber in the MSA based on data contained in GeoTel. However, studies show that between [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] competitors actually exist in this market and that they have deployed fiber and obtained fiber-based collocation in [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] wire centers served by SBC. There are at least [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] known carrier hotels in the MSA, and even though Madison is one of SBC's smaller MSAs and has fewer competitors than

many MSAs in SBC territory, approximately [BEGIN CONFIDENTIAL INFORMATION]
[END CONFIDENTIAL INFORMATION] percent of SBC's demand for both DS1 and DS3
services are located within 1000 feet of known competitive fiber.

B. SBC Faces Stiff Competition in Pricing Flexibility MSAs

21. As the tables below demonstrate, SBC faces substantial competition in the wholesale special access market in MSAs in which SBC has received pricing flexibility. Although the greatest number of competing providers is present in the densest areas, competitors offer service in urban, suburban, and rural MSAs across SBC's service territory.

22. Tier I Markets. SBC considers MSAs with more than two million inhabitants to be "Tier I Markets." Table 2 identifies the known competitors currently providing special access services in Tier I markets and the number of known competitors in each Tier I MSA where SBC has received some measure of pricing flexibility.^{15/}

^{15/}

[BEGIN CONFIDENTIAL INFORMATION]

[END CONFIDENTIAL INFORMATION]

Table 2

[BEGIN CONFIDENTIAL INFORMATION]

[END CONFIDENTIAL INFORMATION]

23. Tier II Markets. SBC considers MSAs with between 500,000 and 1.99 million inhabitants to be "Tier II Markets." Table 3 identifies the known competitors providing special access services in Tier II markets and the number of known competitors in each Tier II MSA in which SBC has received at least some level of pricing flexibility.

Table 3

[BEGIN CONFIDENTIAL INFORMATION]

[END CONFIDENTIAL INFORMATION]

24. Tier III Markets. SBC considers MSAs with fewer than 500,000 but more than 50,000 inhabitants to be “Tier III Markets.” Table 4 identifies the known competitors providing special access services in Tier III markets and the number of known competitors in each Tier III MSA where SBC has achieved at least some level of pricing flexibility.

Table 4

[BEGIN CONFIDENTIAL INFORMATION]

[END CONFIDENTIAL INFORMATION]

25. Most of these competitors have deployed their own facilities and obtained facilities-based collocation in the markets they serve. In fact, fiber-based collocation in SBC’s region has

continued to grow. As set forth in Table 5 below, both the number of collocation arrangements and the use of existing arrangements (measured by the number of cross-connects between collocation arrangements^{16/}) have increased in the last few years.

Table 5

[BEGIN CONFIDENTIAL INFORMATION]

[END CONFIDENTIAL INFORMATION]

26. Table 5 also shows that SBC now has more competitors with cross-connects than with collocation arrangements. This means that SBC's wholesale customers are contracting *with each other* to use their deployed fiber more efficiently, allowing them to offer services in increasingly large geographic areas without the need to significantly expand their own fiber networks or increase their dependence on SBC facilities. Moreover, these arrangements allow collocated carriers to displace a significant portion of the entrance facilities, interoffice transport, and end user channel termination facilities traditionally provided by SBC to its wholesale customers.

C. The Collocation-Based Pricing Flexibility Triggers Significantly Understate Competition

27. As the Commission recognized in the *Pricing Flexibility Order*, its existing, collocation-based pricing flexibility triggers understate the extent of competitive facilities in a wire

^{16/} While some of these cross-connects may be used in the provision of circuit-switched services, the large majority are used to provide special access services.

center because they fail to account for the presence of competitors that do not use collocation and have wholly bypassed ILEC facilities. As I show herein, the Commission is in fact correct in concluding that those triggers *significantly understate* competition. Indeed, it is even more true today due to the proliferation of carrier hotels (which, in many cases, obviate the need to collocate fiber in ILEC central offices), and the entry into the market of cable operators and fixed wireless (such as WiMAX) providers, which completely bypass ILEC facilities.

28. Carrier hotels, in which two or more providers have installed equipment in a location other than an incumbent carrier's central office, are another competitive alternative to collocation within an SBC wire center. These arrangements allow carriers and other customers (including Internet Service Providers (ISPs) and enterprise customers) to install their telecommunications equipment in a centralized location physically independent of the incumbent carrier, and then to connect to the ILEC's central office using common transmission facilities, eliminating the need for every competitive service provider to collocate in each ILEC wire center in which it seeks to offer service. Despite the fact that there are over [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] known carrier hotels in SBC's service territory, the Commission's pricing flexibility triggers do not account for such CLEC-based collocation, and thus dramatically underestimate the intensity of facilities-based competition in areas where there is significant use of carrier hotels, which are very prevalent in SBC's and other regions.

29. Carrier hotels, which have been established in markets across SBC's territory, often are located in the same building as a competing carrier's optical backbone "hub" or "gateway" location, and are designed to provide a suitable environment for telecommunications equipment, with appropriate heating and cooling to protect equipment from extreme temperatures and humidity, and access to electrical power. Many wholesale fiber transport providers have

established such "hotel" arrangements to allow other carriers and enterprise customers to interconnect their networks directly with those of the transport provider.

30. By collocating at a carrier hotel, a competing carrier can gain access to all of the other fiber optic transmission networks that collocate in or connect with that hotel. Competing carriers thus can obtain direct access to competitive transport networks, as well as indirect access to any SBC central office or tandem office that is connected to those alternative transport networks. Additionally, other service providers, such as ISPs and large enterprise customers, may connect directly to such hotels, and thus to any alternative fiber transport facilities collocated there. Carrier hotels thus not only provide an efficient means for competitive carriers and their customers to access alternatives to ILEC special access services, but also an efficient alternative to traditional collocation in ILEC central offices.

31. The following diagrams show various carrier hotel arrangements:

Figure 2

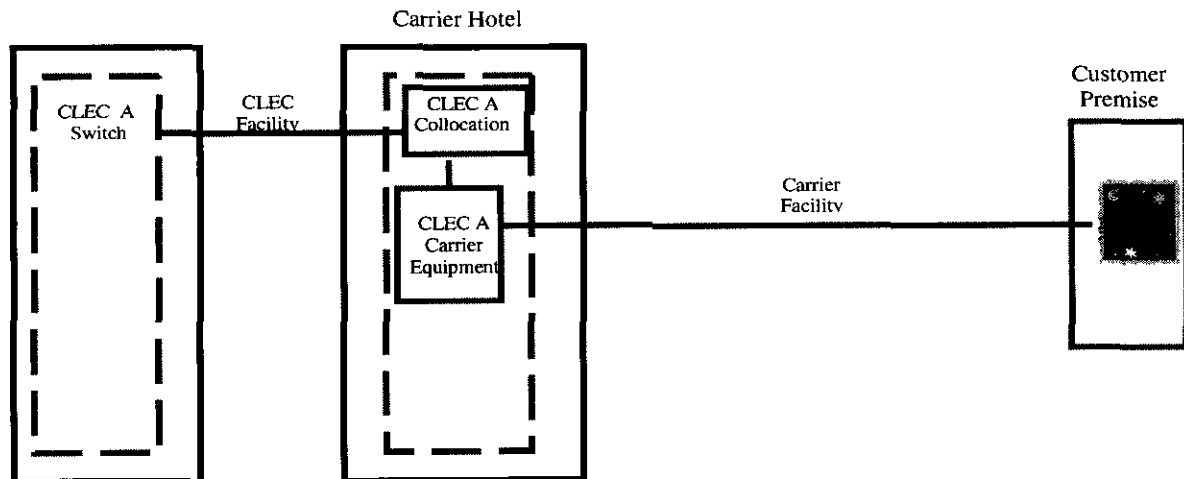


Figure 2 shows CLEC A, which has collocated in a carrier hotel and obtained a direct connection to a customer site through the transmission facilities of another carrier, completely bypassing SBC's network.

Figure 3

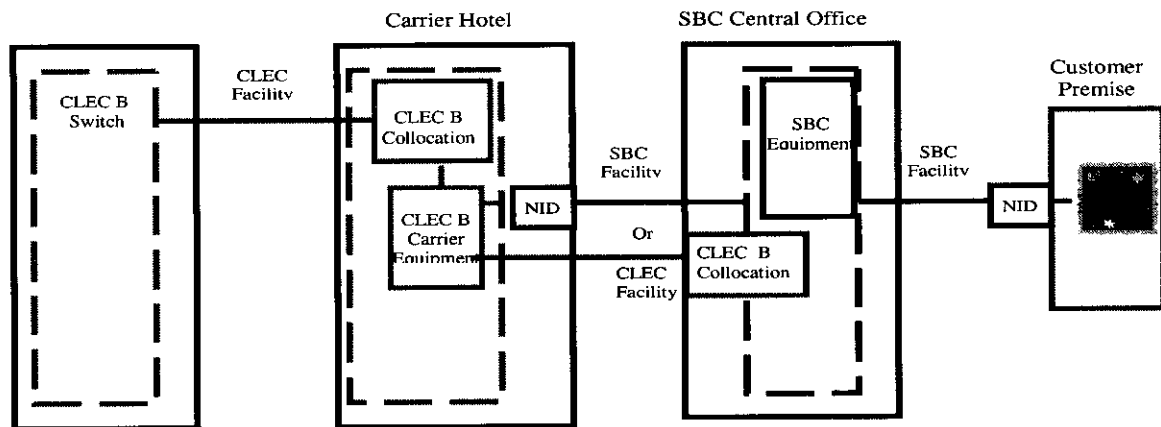


Figure 3 depicts a CLEC (CLEC B) that has collocated in a carrier hotel, and obtained access to an end user customer's location via transmission facilities provided by a facility based competitor or SBC's special access facilities.

Figure 4

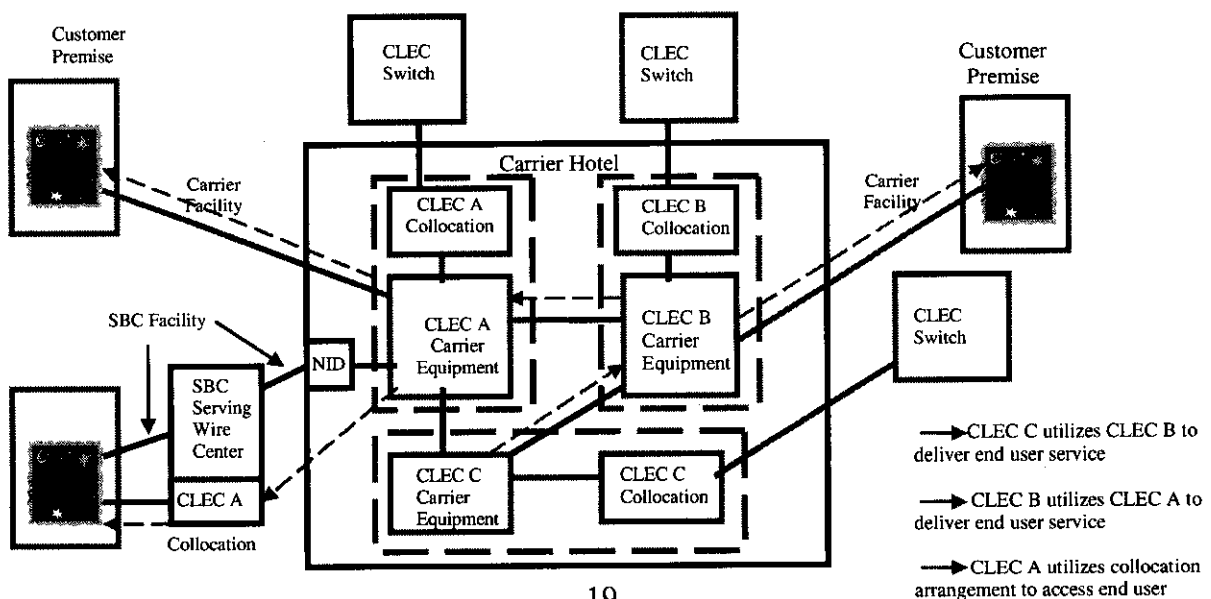


Figure 4 shows several CLECs that have interconnected with each other at a carrier hotel, connecting to each other's facilities and those of SBC to extend the reach of their networks (e.g., CLEC C contracts with CLEC B to deliver service to an end user located in the building where CLEC B has a direct connection).

32. The following are just a few examples of the carrier hotels in SBC's territory, and a description of how they are positioned to offer significant competition to SBC's services:^{17/}

- 1851 Central Drive, Bedford, TX. Businesses and individuals can collocate their equipment in C I Host's telco grade collocation facilities in Dallas. According to C I Host, collocating on its "lightening-fast network" offers customers mission-critical data with "superior security, instant bandwidth management, and rock-solid, redundant Internet fiber connections." This data center sits on top of dual OC192-BLSR4 SONET Rings, which provide connectivity to numerous carriers' networks.
- 55 South Market Street, San Jose, CA. Market Post Tower (MPT) is located in downtown San Jose, California. MPT asserts that it is committed to providing effective programs and services to enhance its customers' business operations and profits. It offers connections to over 200 carriers with no interconnection fees, network redundancy options, quick time-to-market, multiple carrier options at the Main Distribution Frame (MDF), on-site tenant support services, network cost optimization and least-cost routing. There are at least twelve tenants in this hotel, including: AT&T, MCI, WilTel, Qwest, Southern Cross, UUNet, Time Warner, Level 3, Looking Glass, XO, Global Crossing and Primus.
- 100 Taylor Telecom Center, San Antonio, TX. This hotel is located just one block from an SBC Central Office, and houses approximately 23 telecom companies, including the following ten alternative fiber providers: El Paso Networks, Grande Communications, Grande River, ICG, McLeod USA, MCI, Qwest Communications, TexLink Communications, Time Warner Telecom, Xspedius. Other tenants include: AT&T Wireless, Awsome Paging, Boston Communications, Capital telecommunications, Compuvision Network, Contact Wireless, Corban Communications, CRV, DCCI Internet Services, Ezcor Direct, GVEC.net, and Texas.Net.

^{17/} The following descriptions are drawn from CarrierHotels Features Sites, *available at* <http://www.carrierhotels.com/properties/index.shtml>.

- eXchange@200Paul, San Francisco, CA. Offers “unprecedented access to local, national, and global networks and a secure meet me room for easy cross-connects and POPs (points-of-presence) for access to other tenants.” The more than 40 tenants in this hotel include: AboveNet, AT&T, Backbone Communications, BCE Nexxia, Blue Sky Communications, Broadwing Communications, Cogent, Creative Interconnect, Expedient, Global Crossing, Infonet, Internap, IP Networks, ISC, Level 3, Looking Glass, MCI, Neapolitan Networks, NLayer Communications, Novani, OnFiber, Packet Clearing House, PAIX, PremiaNet, Qwest, RCN, Reliable Hosting, San Mateo Regional Network, SBC, San Francisco Internet Exchange Organization, Telekenex, Time Warner Telecom, T-Mobile, United Layer, Universal Access, Verizon Wireless, ViaNet, Widely Integrated Distributed Environment, Wiltel Communications, XO Communications and Yipes.
- Colo4Dallas, 3000 Irvin Blvd, Dallas, TX. This hotel contains diverse fiber vaults with connections to multiple providers through fiber ducts from each vault to the “meet me room.” This arrangement allows tenants to obtain new connections to each other’s networks in days without any inside construction. The owner of the hotel advertises that, “[i]f you need a carrier not listed, let us know. Chances are their fiber runs by our facility.” Tenants include: Level 3, EPGN, SBC, Looking Glass Networks, Yipes, Cogent, C2C Fiber, Global Crossing, Time Warner Telecom, Xspedius and OnFiber.

33. As noted above, carrier hotels enable competitive carriers to interconnect with each other and, in many cases, bypass SBC’s network. In addition, they provide an efficient means for multiple carriers to connect indirectly with SBC’s central offices through common transmission facilities provided by a third party carrier, and thus avoid collocating in every SBC wire center in which they seek to provide service. Carrier hotels thus represent significant competition to SBC’s special access services that is not captured by the FCC’s pricing flexibility triggers, which therefore understate the facilities-based competition SBC actually faces.

34. El Paso illustrates how important the omission of carrier hotels actually is. In the El Paso MSA, SBC has received only very modest pricing flexibility despite robust, facilities-based competition in that market. Specifically, SBC has obtained only Phase I flexibility for dedicated transport and special access other than channel terminations to the end user, and no relief for end-user channel terminations, because competitors have obtained fiber-based collocation in [BEGIN

CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] of the thirteen wire centers in El Paso. But, as the fiber maps attached to my declaration demonstrate, at least [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] carriers have deployed alternative fiber facilities in wire centers containing the vast majority of SBC's special access demand in that MSA.^{18/} These carriers' fiber facilities connect with each other at [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] carrier hotels in the center of El Paso, enabling them to cross connect and hand-off traffic to each other, and thus extend the reach of each other's networks throughout the MSA. There is no reason that these facilities should not be taken into account and that SBC should not be given *broader* pricing flexibility in this market. The suggestion that the pricing flexibility triggers might be too *lenient* thus has it exactly backwards.

35. Given that the price flex triggers fail to account either for competitive fiber that completely bypasses the ILEC's facilities or for carrier hotels, it is even more evident that the triggers are an overly conservative measure of competition. For example, in Dallas/Fort Worth, SBC has not obtained full Phase II pricing flexibility, despite the fact that there are [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] carrier hotels and that [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] percent of DS1s and [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] percent of DS3s within the Dallas/Fort Worth MSA are

^{18/} As noted above, the fiber maps submitted with my declaration display known CLEC fiber that has been identified and mapped by GeoTel based on its own surveys and data supplied directly to GeoTel by competitive fiber providers. These maps understate the amount of competitive fiber and wholly ignore fiber of cable operators.

within 1000 feet of competitive fiber. The situation in Indianapolis is roughly the same, showing robust competition even while SBC is still limited to Phase I pricing flexibility for end user channel terminations. As a fuller examination of the maps attached as Attachment 1 makes clear, the existing “triggers” are inadequate to determine the level of competition that exists in a vast majority of SBC’s MSAs. They disregard real competition and real ILEC facility bypass.

IV. SBC SPECIAL ACCESS SERVICES FACE GROWING COMPETITION FROM INTERMODAL PROVIDERS

36. As discussed in this section, the competitive pressures in the special access market are not limited to traditional wireline carriers. There are a growing number of carriers deploying new technologies that are already competing or have plans to compete aggressively in the special access market.

A. Cable Television Companies

37. The Commission’s collocation-based pricing flexibility triggers also do not capture one of the most important and growing sources of special access competition: intermodal competition. Cable networks currently represent the most robust intermodal alternative to ILEC special access services—indeed, SBC estimates that [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] of the retail DS1 circuits it loses to competitors are lost to cable service providers.^{19/} This competition from cable companies is not surprising because, according to statistics published by the National Cable & Telecommunications Association, cable networks (most of which have been upgraded to provide two-way telecommunications) collectively pass over 108 million homes and already reach over

^{19/} Internal SBC information.

73.2 million customers. These networks also pass more than three million small and medium-sized businesses with two-way hybrid fiber-coaxial cable facilities that are fully capable of providing business class service at speeds well in excess of ILEC DS1-level services. Including the home-based business market, cable providers currently are capable of competing for well over twenty million small and medium-sized business lines.^{20/} And, contrary to popular misconception, cable has widespread infrastructure in business districts, which easily could be used to provide high-capacity dedicated telecommunications services to many commercial buildings. Moreover, cable providers are already powerful players in the market for data services, and aggressively market IP-based voice services (VoIP) to homes and businesses. Indeed, the Commission itself has found cable dominant in the provision of last-mile access for data services to mass-market customers.^{21/} Cable encroachment into the retail and wholesale special access market thus places significant competitive pressure on SBC.

38. A few examples illustrate the burgeoning competitive threat to ILEC special access services posed by cable companies. According to its investor relations reports, Cox Cable currently provides telephony services to over 1.4 million residential telephone customers and wholesale/enterprise services to more than 140,000 locations.^{22/} And its penetration in telecommunications markets is growing rapidly; it has increased its access line penetration from

^{20/} The Insight Research Corporation, *Cable Telephony In Small Businesses: The Competitive Threat To ILECS, 2004-2009*, at 24 (May 2004).

^{21/} *USTA v. FCC*, 290 F.3d 415, 428 (D.C. Cir. 2002) (“*USTA I*”), *cert. denied sub nom. National Ass’n of Regulatory Utility Comm’rs v. United States Telecom. Ass’n*, 538 U.S. 940 (2004).

^{22/} Cox Investor Relations Report – 1st Qtr 2005, available at <http://www.phx.corporate-ir.net/phoenix.zhtml?c=763418&p=irol-newsArticle&t=regular&id=707716&>.

960,000 to 1.5 million voice grade equivalents (VGEs) between 2003 and 2004. In SBC's territory, Cox has deployed its advanced network infrastructure in central business districts, residential neighborhoods, and suburbs in [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] of the 37 SBC markets analyzed for this declaration, and has made significant inroads in those markets. For example, according to an independent market survey conducted for SBC, Cox is serving customers in approximately [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION] buildings in [BEGIN CONFIDENTIAL INFORMATION] [END CONFIDENTIAL INFORMATION].

39. According to an independent market survey conducted for SBC, Cox has not only been targeting large business customers, it also has aggressively targeted wholesale customers, including carriers, ISPs and wireless providers. It offers both point-to-point and dedicated ring special access connections at bandwidths of DS1 to OC48, and even OC192 in some markets. Cox also offers 100 Mbps and 1 Gbps Ethernet service in certain of its markets.

40. Table 6 displays the status of Cox's network in a sample of SBC's markets:

Table 6

[BEGIN CONFIDENTIAL INFORMATION]

[END CONFIDENTIAL INFORMATION]

41. Comcast is another cable provider that is beginning to enter the special access market. Previously, Comcast focused largely on the residential market, where it has built up a large base of customers that it anticipates will reach fifteen million homes by the end of 2005, most of which are located in SBC's territory. According to independent analysts, Comcast is planning to begin moving into the commercial services (voice and data) market as well, where it is well positioned to offer high-capacity services to a large number of business customers. In particular, as many as 5.2 million small and medium-sized businesses lie within Comcast's footprint,^{23/} with

^{23/} Craig Moffett, *et al.*, Bernstein Research Call, Comcast (CMCSA): Margins Continue to Expand; VoIP to Reach 8.0 M Homes Passed in "Next 60 Days," at 10 (Apr. 29, 2005).

nearly 80 percent within 200 feet of Comcast's infrastructure.^{24/} This positions Comcast perfectly to quickly enter the special access market, where it can provide cable broadband services with twice the bandwidth of a DS1 connection, and earn up to eight to ten times the monthly revenue it currently earns from residential cable broadband customers. As one analyst recently put it, this may well be the single most enticing competitive opportunity in the telecommunications industry, and will certainly lure competitive entry from cable providers like Comcast.^{25/}

42. A third cable provider, CableVision, recently formed a subsidiary called Light Path to "provide CLEC type services to the large business segment."^{26/} Light Path initially focused on large business customers spending \$10,000-15,000 per month on telecommunications services, but has since begun to focus on small and medium business customers purchasing services at the DS1 and DS3 levels as well.^{27/}

43. As these few examples demonstrate, cable companies have quickly entered the special access market. They are poised to offer a real and significant facilities-based competitive alternative to all ILEC special access services, but particularly for lower capacity DS_n services aimed at small and medium-sized businesses, which they already have been signing up in significant numbers. As I noted previously, SBC estimates that **[BEGIN CONFIDENTIAL INFORMATION]** **[END CONFIDENTIAL INFORMATION]** of the retail DS1s SBC lost to competitors switched to cable service providers. Consequently, SBC already must take

^{24/} *Id.*

^{25/} *Id.*

^{26/} The Insight Research Corporation, *Cable Telephony In Small Businesses: The Competitive Threat To ILECS, 2004-2009*, at 68 (May 2004).

cable competition into account as it develops rates, terms and conditions for special access services, and in negotiating new contract tariffs for special access in MSAs where it has pricing flexibility. This will only increase as cable more aggressively enters the market.

B. Fixed Wireless Companies

44. The Commission's collocation-based triggers also do not account for the increasingly significant competition SBC and other ILECs have begun to face from fixed wireless broadband providers. While fixed wireless service has been available, in one form or another, for almost fifteen years, and has been widely deployed in Europe and Asia, it has not been a significant market player in the United States until recently. Many analysts and industry participants expect that, now, with the advent of WiMAX technology and the release of a WiMAX industry standard,^{28/} fixed wireless services will soon blossom into a full-fledged, viable alternative for both wholesale and retail special access services. For example, one independent market analyst has projected that the market for wireless broadband will expand rapidly over the next two years. In particular, the analyst projects that:

- Wireless broadband subscriber lines will grow to 2.6 million in 2007.^{29/}
- The wireless broadband market will grow to \$2.4 billion in 2007.^{30/}
- The market for wireless equipment will grow to more than \$1.2 billion in 2007.^{31/}

^{27/} *Id.*

^{28/} See WiMAX Forum, Technical Information, at <http://www.wimaxforum.org/technology>.

^{29/} Roth Capital Partners Industry Report, *WiMAX and the Broadband Wireless Industry*, at 7 (Feb. 10, 2005) (quoting a Pyramid Research 2003 study).

^{30/} *Id.* (quoting a Skylight 2003 study).

^{31/} *Id.* (quoting an In-Stat/MDR study).

45. The reason for this expected growth is simple: WiMAX has many key advantages that will enable it to have a significant impact in the special access market. In particular, as WiMAX providers (like Tower Stream) proudly boast, WiMAX offers customers highly reliable, high-capacity services at a fraction of the cost of traditional, wireline special access services, and can be installed in a fraction of the time it takes to install wireline services.^{32/} For example, because fixed wireless technologies require installation only of a relatively small device in a window or on the roof of a building, DS1 equivalent and higher capacity services can be provisioned over fixed wireless technology in 24 to 48 hours—far less than the four-to-six weeks required to build a conventional wireline circuit. Fixed wireless services also are highly flexible; they can be installed on a temporary basis and bandwidth can be scaled on demand. Additionally, the new WiMAX technology enables providers to offer services with quality commitments that rival those of wireline providers. Thus, for example, TowerStream, which currently offers service in seven metropolitan areas across the country (including cities, like Chicago and Los Angeles, in SBC's territory), is able to offer DS1, DS3 and higher capacity replacement services with Service Level Agreements (SLAs) that are comparable to those offered by wireline carriers and guarantee uptime, latency and throughput.^{33/} And, unlike traditional fixed wireless technologies, WiMAX does not require clear lines of sight, which previously limited the utility of fixed wireless in downtown areas and other areas with obstructions. Rather, WiMAX has a potential coverage area that spans 30 miles,

^{32/} Intel Case Study on TowerStream and WiMAX, *available at* <http://www.towerstream.com/content.asp?pc:23>.

^{33/} TowerStream Service Level Agreement.

virtually without regard to topography, making it an attractive option in both urban and rural environments.

46. Already, wireless broadband technology has obtained a strong foothold in several markets. Cellular providers, which represent a significant percentage of special access demand, have integrated fixed wireless broadband into their networks to backhaul traffic, bypassing traditional wireline special access services. For example, First Avenue Networks, which describes itself as a “mobile carrier’s carrier,” offers wireless broadband backhaul on a nationwide basis in competition with LECs.^{34/} Fixed wireless broadband also has been deployed successfully to deliver high-capacity DSL and DS1-equivalent services in rural and underserved areas. OPASTCO, for example, reports that 20 percent of its members that provide broadband services in rural areas do so using wireless over unlicensed spectrum, and another four percent do so over licensed spectrum.^{35/} And in metropolitan areas, fixed wireless providers such as TowerStream, Speakeasy and NextWeb have rapidly entered the market, signing up many enterprise, small and medium-sized businesses. The following are just a few examples of the fixed wireless providers that provide increasingly robust competition to special access services.

47. XO Communications, which owns the largest footprint of U.S. fixed wireless spectrum, covering 95 percent of the top U.S. business markets,^{36/} uses licensed spectrum to offer

^{34/} Adlane Fellah *et al.*, *WiMAX and Broadband Wireless (Sub11Ghz) Worldwide Market Analysis and Trends 2005-2010*, at 17 (Maravedis Telecom Market Research & Analysis 2005).

^{35/} Reply Comments of the Organization for the Promotion and Advancement of Small Telecommunications Companies and the Rural Telecommunications Group, filed in GN Docket No. 04-163, May 23, 2005, at 1-2.

^{36/} XO Network Details: XO Wireless Spectrum, *available at* <http://www.xo.com/about/network/details.html>.